KIRF: I know number bonds for each number up to 20

Year Three – Autumn 1

Number bonds show us how numbers join together. They are very important for addition and subtraction. This half term, the children will be learning number bonds for all numbers up to 20; they should be able to recall these independently.

The children should know the number bonds to all numbers up to 20

e.g. Number bonds to 15: 0 + 15 = 15,

1 + 14 = 15, 2 + 13 = 15, etc.

Number bonds to 16: 0 + 16 = 16,

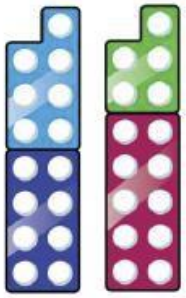
1 + 15 = 16, 2 + 14 = 16, etc.

The children should know all the number bonds that total 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20

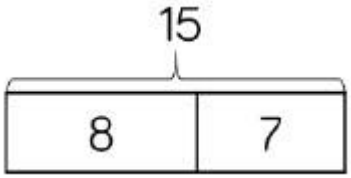
What can this look like? -

Examples to 15

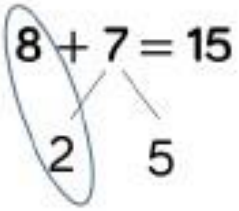
Concrete:



Pictorial:



Abstract:



Questions to ask at home

What do we need to add to 7 to make 20?

If I have 15, how many more do I need to get to 18?

What is the difference between 19 and 7?

Key vocabulary

2 **add** 11 **equals** 13

5 **plus** 12 is **the same as** 17

16 **take away** 7 equals 9

19 **subtract** 3 makes 16

18 **minus** 9 equals 9

Things to try

Chants- Practice chanting the number bonds.

Everyday Objects- Gather together objects and separate them in s many different ways as possible, write the calculation to match each one.

Make a poster - We use lots of concrete, pictorial and abstract methods in school. Your child could make a poster on any number 1-20 showing different methods to make the number bonds.

Websites:

https://www.topmarks.co.uk/maths-games/hit-the-button for number bonds to 20.

https://www.mathplayground.com/number_bonds_20.html for number bonds on different numbers

KIRF: I know the 3 times table (× and ÷)

A times table is a list of multiples of the given number. They are very important for many calculations. This half term, the children will be learning their 3 times tables including the division facts.

Year Three - Autumn 2

Questions to ask at home

What is 3 **multiplied by** 8?

What is 8 **times** 3?

What is 24 **divided by** 3?

Key vocabulary

3 **multiplied** by 6 is **equal to** 18

5 **times** 3 and 3 **times** 5 are **equivalent**

30 **shared by** 10 is **equal to** 3

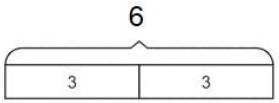
27 **divided by** 9 **equals** 3

What can this look like?

Concrete:

3 × 2 = 6

Pictorial:



3 × 2 = 6

Abstract:

3 × 7 = 21

7 × 3 = 21

21 ÷ 3 = 7

Things to challenge

If your child becomes confident with these multiplications try them with missing number questions e.g.

3 × ◯ = 18 or ◯ ÷ 3 = 11

Things to try

Chants- Practice chanting the times table.

Everyday Objects- Gather together objects and separate them into groups of 3.

Youtube - There are lots of Times table songs on Youtube to aid learning, why not try one out.

Websites:

https://www.topmarks.co.uk/maths-games/hit-the-button

https://www.timestables.co.uk/

3 × 1 = 3	1 × 3 = 3	3 ÷ 3 = 1	3 ÷ 1 = 3
3 × 2 = 6	2 × 3 = 6	6 ÷ 3 = 2	6 ÷ 2 = 3
3 × 3 = 9	3 × 3 = 9	9 ÷ 3 = 3	9 ÷ 3 = 3
3 × 4 = 12	4 × 3 = 12	12 ÷ 3 = 4	12 ÷ 4 = 3
3 × 5 = 15	5 × 3 = 15	15 ÷ 3 = 5	15 ÷ 5 = 3
3 × 6 = 18	6 × 3 = 18	18 ÷ 3 = 6	18 ÷ 6 = 3
3 × 7 = 21	7 × 3 = 21	21 ÷ 3 = 7	21 ÷ 7 = 3
3 × 8 = 24	8 × 3 = 24	24 ÷ 3 = 8	24 ÷ 8 = 3
3 × 9 = 27	9 × 3 = 27	27 ÷ 3 = 9	27 ÷ 9 = 3
3 × 10 = 30	10 × 3 = 30	30 ÷ 3 = 10	30 ÷ 10 = 3
3 × 11 = 33	11 × 3 = 33	33 ÷ 3 = 11	33 ÷ 11 = 3
3 × 12 = 36	12 × 3 = 36	36 ÷ 3 = 12	36 ÷ 12 = 3

KIRF: I know the 4 times table (× and ÷)

Year Three – Spring 1

A times table is a list of multiples of the given number. They are very important for many calculations. This half term, the children will be learning their 4 times tables including the division facts.

Questions to ask at home

What is 4 **multiplied by** 7?

What is 12 **times** 4?

What is 32 **divided by** 4?

Key vocabulary

4 **multiplied** by 6 is **equal to** 24

2 **times** 4 and 4 **times** 2 are **equivalent**

24 **shared by** 6 is **equal to** 4

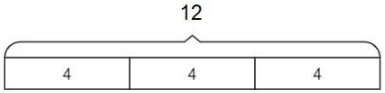
40 **divided by** 4 **equals** 10

What could this look like?

Concrete:

4 × 2 = 8

Pictorial:



4 × 3 = 12

Abstract:

5 × 4 = 20

4 × 5 = 20

20 ÷ 4 = 5

Things to challenge

If your child becomes confident with these multiplications try them with missing number questions e.g.

4 × ◯ = 24 or ◯ ÷ 4 = 11

Things to try

Chants- Practice chanting the times table.

Everyday Objects- Gather together objects and separate them into groups of 4.

Double & Double again - Multiplying by 4 is the same as doubling and doubling again. Double 6 is 12 and double 12 is 24, so 6 × 4 = 24.

Websites:

https://www.topmarks.co.uk/maths-games/hit-the-button

https://www.timestables.co.uk/

4 × 1 = 4	1 × 4 = 4	4 ÷ 4 = 1	4 ÷ 1 = 4
4 × 2 = 8	2 × 4 = 8	8 ÷ 4 = 2	8 ÷ 2 = 4
4 × 3 = 12	3 × 4 = 12	12 ÷ 4 = 3	12 ÷ 3 = 4
4 × 4 = 16	4 × 4 = 16	16 ÷ 4 = 4	16 ÷ 4 = 4
4 × 5 = 20	5 × 4 = 20	20 ÷ 4 = 5	20 ÷ 5 = 4
4 × 6 = 24	6 × 4 = 24	24 ÷ 4 = 6	24 ÷ 6 = 4
4 × 7 = 28	7 × 4 = 28	28 ÷ 4 = 7	28 ÷ 7 = 4
4 × 8 = 32	8 × 4 = 32	32 ÷ 4 = 8	32 ÷ 8 = 4
4 × 9 = 36	9 × 4 = 36	36 ÷ 4 = 9	36 ÷ 9 = 4
4 × 10 = 40	10 × 4 = 40	40 ÷ 4 = 10	40 ÷ 10 = 4
4 × 11 = 44	11 × 4 = 44	44 ÷ 4 = 11	44 ÷ 11 = 4
4 × 12 = 48	12 × 4 = 48	48 ÷ 4 = 12	48 ÷ 12 = 4

KIRF: I know the 8 times table (× and ÷)

A times table is a list of multiples of the given number. They are very important for many calculations. This half term, the children will be learning their 8 times tables including the division facts.

Year 3 KIRF – Spring 2

Questions to ask at home

What is 8 **multiplied by** 7?

What is 9 **times** 8?

What is 32 **divided by 8**?

Key vocabulary

8 **multiplied** by 3 is **equal to** 24

2 **times** 8 and 8 **times** 2 are **equivalent**

32 **shared by** 4 is **equal to** 8

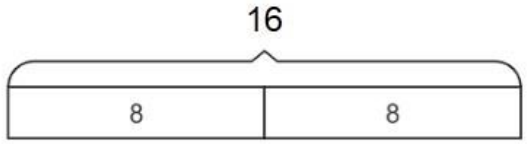
40 **divided by** 8 **equals** 5

What can this look like? -

Concrete:

8 × 2 = 16

Pictorial:



8 × 2 = 16

Abstract:

4 × 8 = 32 32 ÷ 8 = 4

5 × 8 = 40 40 ÷ 8 = 5

Things to challenge

If your child becomes confident with these multiplications try them with missing number questions e.g.

8 × ◯ = 24 or ◯ ÷ 8 = 7

Things to try

Chants- Practice chanting the times table.

Double your 4's - Multiplying a number by 8 is like multiplying by 4 and then doubling. 8×4=32 so double 32=64, therefore 8×8=64

Five Six Seven Eight - fifty six is seven times eight (56=7×8)

Websites:

https://www.topmarks.co.uk/maths-games/hit-the-button

8 × 1 = 8	1 × 8 = 8	8 ÷ 8 = 1	8 ÷ 1 = 8
8 × 2 = 16	2 × 8 = 16	16 ÷ 8 = 2	16 ÷ 2 = 8
8 × 3 = 24	3 × 8 = 24	24 ÷ 8 = 3	24 ÷ 3 = 8
8 × 4 = 32	4 × 8 = 32	32 ÷ 8 = 4	32 ÷ 4 = 8
8 × 5 = 40	5 × 8 = 40	40 ÷ 8 = 5	40 ÷ 5 = 8
8 × 6 = 48	6 × 8 = 48	48 ÷ 8 = 6	48 ÷ 6 = 8
8 × 7 = 56	7 × 8 = 56	56 ÷ 8 = 7	56 ÷ 7 = 8
8 × 8 = 64	8 × 8 = 64	64 ÷ 8 = 8	64 ÷ 8 = 8
8 × 9 = 72	9 × 8 = 72	72 ÷ 8 = 9	72 ÷ 9 = 8
8 × 10 = 80	10 × 8 = 80	80 ÷ 8 = 10	80 ÷ 10 = 8
8 × 11 = 88	11 × 8 = 88	88 ÷ 8 = 11	88 ÷ 11 = 8
8 × 12 = 96	12 × 8 = 96	96 ÷ 8 = 12	96 ÷ 12 = 8

KIRF: I can recall facts about durations of time

Year Three - Summer 1

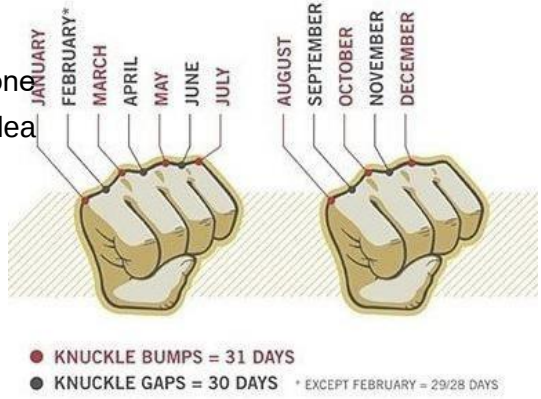
A duration of time is a measurement between two given times. This could be seconds, minutes, hours, days or even months. This half term, the children will be learning duration of time facts. The aim is for them to recall them instantly.

Things to try

Rhymes and memory games -

'30 days has September, April, June and November. All the rest have 31, except February, it's the one which only has 28 days clea and 29 in each leap year.'

Use your knuckles -



When's your birthday - What month is your mum/dad/brother/sisters birthday? How many days are there in it? What month comes before your mum/dad/brother/sisters birthday? Which month comes afterwards? How many days are in those months?

Questions to ask at home

How many days are in **one year**?

How many days are in a **leap year**?

What day comes before **February 1st**?

What day comes after **March 31st**?

Key facts

There are 60 seconds in a minute.
There are 60 minutes in an hour.
There are 24 hours in a day.
There are 7 days in a week.
There are 12 months in a year.
There are 365 days in a year.
There are 366 days in a leap year.

Number of days in each month

January	31	July	31
February	28/29	August	31
March	31	September	30
April	30	October	31
May	31	November	30
June	30	December	31

Children also need to know the order of the months in a year.

Key vocabulary

There are 24 **hours** in a day

In a **leap year** there is an **extra day in February**

August is the **month after** July

There are **60 minutes in an hour** and **120 minutes in two hours.**

KIRF: I can tell the time to the nearest minute

Year Three - Summer 2

This half term, the children will be learning how to tell the time on an analogue clock (a clock with hands) to the nearest minute. The aim is for them to be able to read the time instantly.

Things to try

Websites -

https://mathsframe.co.uk/en/resources/resource/116/telling-the-time

Use this website for an interactive telling the time game.

A watch- Practice is important with telling the time and a watch is an easy was to practice those newly learnt skills.

Talk about time

Discuss what time things happen. Try to make sure an analogue clock is visible at home or the child can use a watch throughout the day.

Breaking it down

Children need to be able to tell the time using a clock with hands. This target can be broken into several steps:

- I can tell the time to the nearest hour.
- I can tell the time to the nearest half hour.
- I can tell the time to the nearest quarter hour.
- I can tell the time to the nearest 5 minutes.
- I can tell the time to the nearest minute.

Key vocabulary

The time is 12 **o'clock**

It is **half past** two

It is **quarter to** five

It is **twelve minutes past** one

It is **thirty six minutes past four.**

Questions to ask at home

What **hour** is it?

Where does the **minute hand point** to when it is **quarter past the hour**?

What time is it **now**?

What would an **analogue clock** look like **in 6 minutes time**?